Allowable Subject Matter

Claims 19 – 23 and 26 – 37 are allowed. The prior art of record fail to teach, among other limitations, obtaining a lateral maneuverability map for a vehicle that represents, within an area of movement, contours of nonnegotiable regions to be circumvented, bands surrounding nonnegotiable regions and having the width of a maneuver space considered as necessary for a free lateral movement for the vehicle, taking into account the maneuvering capabilities of the vehicle and the need for the vehicle to avoid regions arbitrarily considered as nonnegotiable and regions of complete freedom of lateral movement for the vehicle situated outside nonnegotiable regions and surrounding bands; generation of a distance map covering the area of movement of the vehicle to be mapped and giving the distances from its external points to the regions to be circumvented, relative to the borders of the regions to be circumvented; considering the regions to be circumvented as a first type of region, assembly of regions of a second type, of the connex points whose distances provided by the distance map are less than a threshold arbitrarily considered as necessary for free lateral movement of the vehicle, assembly in regions of a third type of the connex points whose distances provided by the distance map are greater than the threshold; and representation of the area of movement in the form of a subdivision into these three types of regions; the map, wherein the width Sd of the bands constituting the second type of region is determined by applying the equation: $Sd = HLD\_M + HLD\_T + SQRT((HLD\_L)/ 2)^2 + HLD\_T^2)$ HLD_M being a safety margin; HLD_L being a configuration datum defined in terms of flight time or distance traveled over the ground; HLD_T being a turning radius

corresponding to the equation: HLD_T = GS^2/ g x tan (HLD_B) wherein g being the

gravitational acceleration; GS being the ground speed of the aircraft; and HLD_B being

the maximum value permitted for the roll angle adopted by the aircraft when turning.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to /Yonel Beaulieu/ whose telephone number is (571) 272-

6955. The examiner can normally be reached on Mon., Wed. & Thur. between 0900

and 1600.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas BLACK can be reached on (571) 272-6956. The fax phone number

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